



US EPA RECORDS CENTER REGION 5



489293

June 10, 2010

Mr. Sam Chummar
Work Assignment Manager
U.S. Environmental Protection Agency (EPA)
77 West Jackson Boulevard (SR-6J)
Chicago, IL 60604

**Subject: Field Oversight Summary for May 17 through June 3, 2010
Plainwell Mill Site, Operable Unit No. 7 of
Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site
Plainwell, Allegan County, Michigan
Remedial Action Contract (RAC) 2 No. EP-S5-06-02
Work Assignment No. 041-RSBD-059B**

Dear Mr. Chummar:

SulTRAC has prepared the enclosed summary to document Phase II remedial investigation activities at the above-referenced site from May 17 through June 3, 2010. Weyerhaeuser Company is the potentially responsible party for the site, and Conestoga-Rovers & Associates, Inc., (CRA), is its environmental contractor. Appendix A of this summary contains a photographic log of the investigation activities. Appendix B contains SulTRAC's field oversight notes. Attachment 1 contains CRA's site maps with proposed sample locations.

If you have any questions about the enclosed summary, please call me at (312) 201-7491.

Sincerely,

A handwritten signature in black ink, appearing to read "Jeffrey J. Lifka".

Jeffrey J. Lifka
Project Manager

Enclosure

cc: Thomas Harrison, EPA Contracting Officer (letter only)
Ron Riesing, SulTRAC Program Manager
Cheryl Gorman, SulTRAC Environmental Geologist
Bethany Hand, SulTRAC Environmental Scientist
File

1 S. Wacker Drive, 37th Floor, Chicago, IL 60606
Tel 312.201.7700 Fax 312.201.0031

ENCLOSURE

**FIELD OVERSIGHT SUMMARY
FOR MAY 17 THROUGH JUNE 3, 2010
PLAINWELL MILL SITE
PLAINWELL, ALLEGAN COUNTY, MICHIGAN**

(Nine Pages)

**FIELD OVERSIGHT SUMMARY
FOR MAY 17 THROUGH JUNE 3, 2010
PLAINWELL MILL SITE
PLAINWELL, ALLEGAN COUNTY, MICHIGAN**

SulTRAC Oversight Personnel: Bethany Hand and Cheryl Gorman
Reporting Period: May 17 through June 3, 2010

INTRODUCTION

As requested by the U.S. Environmental Protection Agency (EPA) under contract number EP-S5-06-02 and work assignment number 041-RSBD-059B, SulTRAC oversaw Phase II of the Remedial Investigation (RI) for on-site buildings at the Plainwell Mill Site, Operable Unit No.7 of the Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site in Plainwell, Michigan. Weyerhaeuser Company (Weyerhaeuser) is the potentially responsible party (PRP) for the site. Conestoga-Rovers & Associates, Inc. (CRA) is the environmental consultant to Weyerhaeuser.

Activities for this sampling period began on May 17, 2010, and as requested by EPA, SulTRAC began oversight activities at the site on May 26, 2010. SulTRAC obtained updates for sampling activities from CRA for the days SulTRAC was not present. This report summarizes SulTRAC's oversight activities and documentation of the PRP's Phase II activities from May 17 through June 3, 2010; issues and developments that arose during the oversight activities; and future activities. Appendix A contains a photographic log of the site activities, including Photographs 1 through 4. Appendix B contains a copy of SulTRAC's field oversight notes. Attachment 1 contains CRA's site maps (Figures 1 and 2) with proposed sample locations (Figures 3A through 6).

RI ACTIVITIES

During the sampling period of May 17 through June 3, 2010, SulTRAC provided oversight from May 26 through June 3, 2010. SulTRAC observed CRA collecting soil samples from soil borings and groundwater samples from temporary wells throughout the site. CRA maintained at least two field technicians on site (David Rivers, Corrie Bondy, and/or Evan Varnas). SulTRAC did not collect any split samples during this sampling event.

From May 17 through 25, 2010, CRA conducted test pits and advanced soil borings throughout the site. The locations of the test pits and soil borings are presented on CRA's figures as shown in Attachment 1. Twenty-five test pits were proposed; however, an additional test pit was added next to MW-5 for a total of 26 test pits excavated throughout the site. Test pits did not reveal any visual contamination or evidence of residual paper. Soil samples were collected from the test pits in accordance with CRA's field sampling plan (FSP) (CRA 2009). CRA advanced approximately 60 soil borings during this time period and collected up to two soil samples per location. Soil samples were collected in accordance with CRA's FSP (CRA 2009).

SulTRAC was on site from May 26 through June 3, 2010 to provide oversight of CRA's sampling activities. CRA collected soil samples from soil borings and groundwater samples from temporary monitoring wells. The soil borings were advanced using a track-mounted Geoprobe[®], access permitting, throughout the on-site buildings. A jack-hammer was used at locations where access was limited by either the width of the Geoprobe or overhead clearance. The soil samples were collected for analyses for volatile organic compounds (VOC), semi-volatile organic compounds (SVOC), polychlorinated biphenyls (PCB), target analyte list (TAL) metals, and general chemistry parameters. The groundwater samples were analyzed for VOCs, SVOCs, PCBs, and TAL metals (filtered and unfiltered). At soil boring locations where visual or olfactory evidence of contamination was encountered, samples were collected for cyanide analysis.

Prior to collection of groundwater samples from the temporary wells, groundwater quality parameters were recorded by CRA. Samples were collected after the parameters had stabilized. The parameters measured were pH, temperature, specific conductivity, oxidation-reduction potential, and dissolved oxygen. Groundwater quality parameters were obtained at 5-minute intervals. Turbidity was not measured because

two TAL metal samples, filtered and unfiltered, were to be collected at each location. Groundwater collected from the temporary wells appeared clear.

During this sampling event, all soil cuttings and purge water were placed in 55-gallon steel drums and were affixed with proper labels. The concrete cores were placed in plastic resealable bags, with the location labeled on the bag as requested by the Michigan Department of Natural Resources and Environment (MDNRE).

The following are summaries of the daily activities while SulTRAC was on site providing oversight. Details of the daily activities are recorded in the field notes presented in Appendix B.

Wednesday, May 26, 2010

SulTRAC representative Bethany Hand conducted oversight activities. CRA personnel on site included two field technicians (David Rivers and Corrie Bondy), the field project coordinator (Jodi Dembowske), CRA's drillers, and CRA's surveyors. The field project coordinator was on site infrequently throughout the day, and the sampling and logging were conducted by the field technicians. CRA had two drilling crews working concurrently throughout the site to expedite sample collection. Each team of drillers had one field technician logging and collecting soil samples. One CRA drilling crew began drilling in the northern portion of building 19 while the other crew began drilling in the basement of building 9. A total of 24 soil borings were advanced throughout the day. Most soil samples consisted of either (1) fill materials in the upper soil intervals followed by native sand and gravel materials or (2) all native sand and gravel materials. Up to two soil samples were collected from each soil boring location for laboratory analysis. Only one soil sample could be collected from some of the soil boring locations due to the shallow groundwater table (4 to 10 feet below ground surface [bgs]) and low soil recoveries. Soil samples were collected for analyses for VOCs, SVOCs, PCBs, TAL metals, and general chemistry parameters.

One drilling crew had difficulty drilling inside the buildings because of the thickness of the concrete (over 20 inches thick), requiring use of a concrete corer to advance through the concrete. Fly-ash appeared to be present at soil boring location SB-263, and a temporary well was installed at this location.

Thursday, May 27, 2010

SulTRAC representative Bethany Hand conducted oversight activities. CRA personnel on site included two field technicians (David Rivers and Corrie Bondy), the field project coordinator (Jodi Dembowski), CRA's drillers, and CRA's surveyors. The field project coordinator was on site infrequently throughout the day, and the sampling and logging were conducted by the field technicians. CRA had two drilling crews working concurrently throughout the site to expedite sample collection. Each team of drillers had one field technician logging and collecting soil samples. One CRA drilling crew continued drilling in building 19, while the other crew began drilling in buildings 1 and 1A (see Photograph No. 1 in Appendix A). A total of 25 soil borings were advanced throughout the day. Soil borings were attempted at three additional locations, but the Geoprobe encountered refusal. Most soil samples consisted of either (1) fill materials in the upper soil intervals followed by native sand and gravel materials or (2) all native sand and gravel materials. Up to two soil samples were collected from each soil boring location for laboratory analysis. Only one soil sample could be collected from some soil boring locations due to the shallow groundwater table (4 to 10 feet bgs) and low soil recoveries. Soil samples were collected for analyses for VOCs, SVOCs, PCBs, TAL metals, and general chemistry parameters.

A layer of residual paper and coal slag was found at soil boring locations SB-2011 and SB-2010 (see Photograph No. 2 in Appendix A). Samples collected from these two borings were also analyzed for cyanide. A below-grade vault was discovered when drilling inside building 3 at soil boring location SB-226. The drilling crew moved the soil boring location approximately 10 feet but still encountered the vault; therefore, a soil boring was not advanced at this location on this day. A soil sample jar collected from 8 to 10 feet bgs at soil boring SB-327 in the Sludge Dewatering building was broken, and a sample re-collection occurred. A temporary well was also installed in the Sludge Dewatering building at soil boring location SB-326. Soil boring SB-2010 had to be moved approximately 1 foot to avoid underground utilities at the originally proposed location.

Friday, May 28, 2010

SulTRAC representative Bethany Hand conducted oversight activities. CRA personnel on site included two field technicians (David Rivers and Corrie Bondy), the field project coordinator (Jodi Dembowski), CRA's drillers, and CRA's surveyors. SulTRAC discussed with CRA the soil boring locations that had to be moved because of either inaccessibility or multiple refusals. During this time, the drillers were also using the concrete corer to penetrate thick concrete at soil borings SB-253, SB-209, SB-251, SB-271, and SB-256. Discussion of the situation among the EPA Work Assignment Manager (WAM) (Sam Chummar), the SulTRAC project manager (Jeff Lifka), and the CRA project manager (Greg Carli) led to agreement

that the following soil borings would be re-located due to refusals: SB-270, SB-226, SB-256, SB-229, SB-228, SB-235, SB-251, SB-252, SB-297, SB-267 and SB-248. Moreover, because soil borings SB-259 and SB-260 also were inaccessible, these two locations were combined into one location outside of the crawl space in building 26/27 and into building 11. Soil samples were not collected on this day because the laboratory would not accept samples for delivery on Saturday.

Tuesday, June 1, 2010

SulTRAC representative Cheryl Gorman conducted oversight activities. CRA personnel on site included two field technicians (David Rivers and Evan Varnas), the field project coordinator (Jodi Dembowske), CRA's drillers, and CRA's surveyors. The field project coordinator was on site infrequently throughout the day, and the sampling and logging were conducted by the field technicians. When SulTRAC arrived on site, Jodi Dembowske was instructing the utility locators to clear the new sample locations discussed the previous week, and drilling crews were using the concrete corer to penetrate the thick concrete at SB-251. One field technician (David Rivers) was with the drillers beginning in building 9A, and the second field technician (Evan Varnas) was collecting groundwater samples from the temporary well installed the previous week. A total of four soil borings were advanced throughout the day, and groundwater samples were collected from three temporary wells. Most soil samples consisted of either (1) fill materials in the upper soil intervals followed by native sand and gravel materials or (2) all native sand and gravel materials. Up to two soil samples were collected from each soil boring location for laboratory analysis. Only one soil sample could be collected from some of the soil boring locations due to the shallow groundwater table (4 to 10 feet bgs) and low soil recoveries. Soil samples were collected for analyses for VOCs, SVOCs, PCBs, TAL metals, and general chemistry parameters. Groundwater samples were collected for analyses for VOCs, SVOCs, PCBs, and TAL metals (filtered and unfiltered).

After several attempts to core through the thick concrete at locations SB-251 and SB-252, these locations were not sampled on this day, and CRA's field technician said he would inquire of the field project coordinator whether these two locations could be skipped. The temporary well installed the previous week at location SB-246 did not produce water, and therefore this location was re-drilled and a new temporary well was installed. The groundwater sample collected from the temporary well set at SB-263 was also to be analyzed for cyanide.

Wednesday, June 2, 2010

SulTRAC representative Cheryl Gorman conducted oversight activities. CRA personnel on site included two field technicians (David Rivers and Evan Varnas), the field project coordinator (Jodi Dembowske),

CRA's drillers, and CRA's surveyors. The field project coordinator was on site infrequently throughout the day, and the sampling and logging were conducted by the field technicians. One field technician (David Rivers) was with the drillers operating the Geoprobe at the northern portion of the site next to building 28, and the second field technician (Evan Varnas) was with the drillers operating the jack-hammer in the train shed, next to building 1. A total of nine soil borings were advanced throughout the day, and groundwater samples were collected from one temporary well at soil boring location SB-246 (see Photograph No. 3 in Appendix A). Most soil samples consisted of either (1) fill materials in the upper soil intervals followed by native sand and gravel materials or (2) all native sand and gravel materials. Up to two soil samples were collected from each soil boring location for laboratory analysis. Only one soil sample could be collected from some of the soil boring locations due to the shallow groundwater table (4 to 10 feet bgs) and low soil recoveries. Soil samples were collected for analyses for VOCs, SVOCs, PCBs, TAL metals, and general chemistry parameters. Groundwater samples were collected for analyses for VOCs, SVOCs, PCBs, and TAL metals (filtered and unfiltered).

Sampling with the jack-hammer yielded much lower recoveries, and two soil samples were not collected from each of several locations. A temporary well was installed at soil boring location SB-297 (see Photograph No. 4 in Appendix A).

Thursday, June 3, 2010

SulTRAC representative Cheryl Gorman conducted oversight activities. CRA personnel on site included two field technicians (David Rivers and Evan Varnas), the field project coordinator (Jodi Dembowske), CRA's drillers, and CRA's surveyors. The field project coordinator was on site infrequently throughout the day, and the sampling and logging were conducted by the field technicians. Only two soil borings were to be advanced on this day with the jack-hammer. One soil boring was advanced to re-sample SB-225 because the sample jar had broken at the laboratory. The field technician, David Rivers, collected the soil samples with the drillers. The other field technician, Evan Varnas, collected groundwater samples from the remaining temporary wells located at SB-297 and SB-279. Soil samples were collected for analyses for VOCs, SVOCs, PCBs, TAL metals, and general chemistry parameters. Groundwater samples were collected for analyses for VOCs, SVOCs, PCBs, and TAL metals (filtered and unfiltered).

CRA finished all sampling activities as part of this Phase II building investigation and began (1) filling in the borings with bentonite chips and (2) resurfacing with concrete at the soil borings located within the on-site buildings. The temporary wells were removed and abandoned.

ISSUES AND DEVELOPMENTS

No major issues or developments arose during this period of oversight activities. Many soil boring locations had to be re-located due to refusals or space constraints within the buildings. Drilling within the buildings was difficult due to the thickness of the concrete (over 30 inches in some locations), precluding sampling at some locations. Although CRA continued to secure the buildings while offsite, evidence that unauthorized people were entering the buildings overnight was encountered, and that continued to be an issue throughout this sampling event. The local police were called on several occasions to ensure the safety of CRA's and SulTRAC's staff.

FUTURE ACTIVITIES

Future sampling activities are not planned at this time. CRA will evaluate data received from its laboratories and report the results to EPA. If upon receipt and evaluation of the sample results it is determined that additional sampling is warranted, SulTRAC will oversee the sampling activities as requested by EPA.

SulTRAC will also continue to provide technical review of any documents generated by the PRP and provide technical comments to EPA as necessary.

REFERENCES

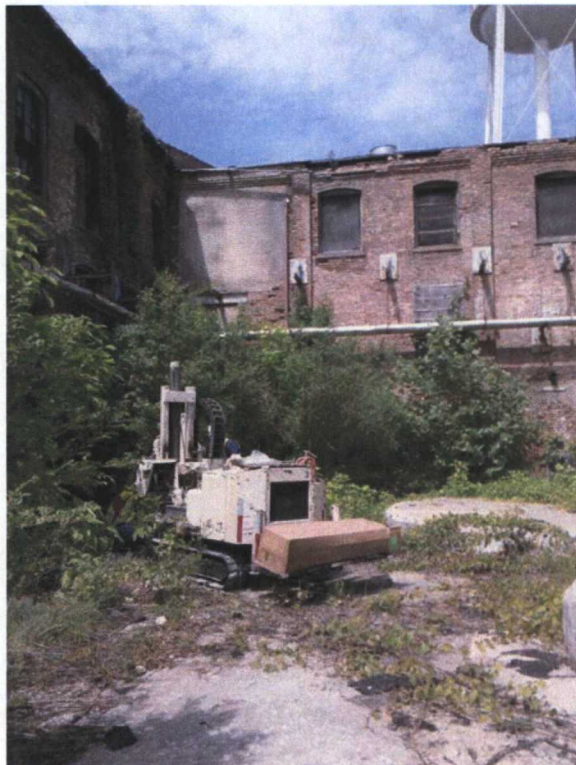
Conestoga-Rovers & Associates (CRA). 2009. "Multi-Area Field Sampling Plan – 12th Street Landfill Site (Operable Unit No. 4) and Plainwell Mill Site (Operable Unit No. 7) – Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site – Revision 05." September 23.

APPENDIX A
SULTRAC PHOTOGRAPHIC LOG
(Two Pages)



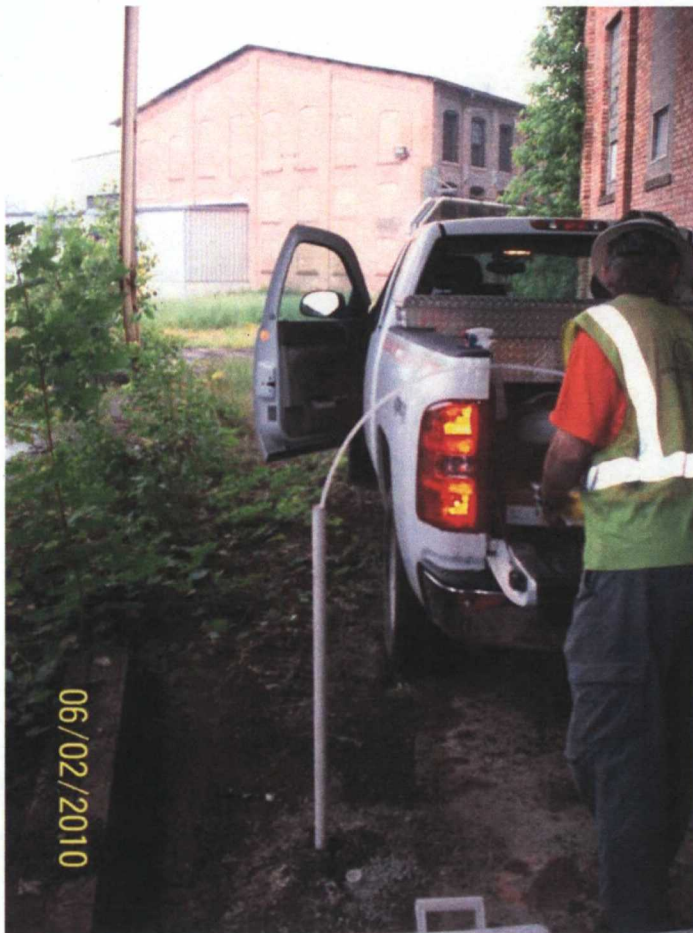
Photograph No. 1
 Orientation: South
 Description: Northern entrance to Buildings 1 and 1A.

Location: Plainwell Mill Site
 Date: May 27, 2010

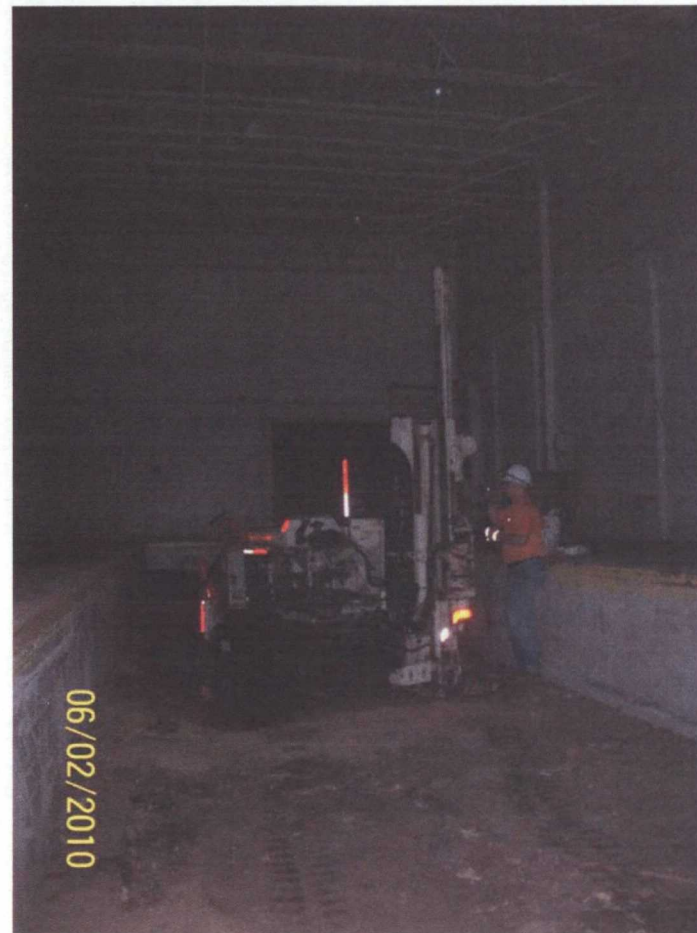


Photograph No. 2
 Orientation: North
 Description: Soil boring location SB-2011.

Location: Plainwell Mill Site
 Date: May 27, 2010



Photograph No. 3 Location: Plainwell Mill Site
 Orientation: North Date: June 2, 2010
 Description: Conestoga-Rovers & Associates, Inc. (CRA) collecting groundwater samples from temporary well located at SB-246.



Photograph No. 4 Location: Plainwell Mill Site
 Orientation: West Date: June 2, 2010
 Description: CRA collecting soil samples from soil boring SB-297.

APPENDIX B
SULTRAC OVERSIGHT FIELD NOTES
(14 Sheets)

125 locations
25 test pits

↑ 81°

5-20-10 Plainwell Mill site Sunny

0900 Tetra Tech onsite - Taigate meeting

- met with jodie to go over site details

There have been 2 locations so far they were unable to get to - 239 & 261. But they will go back and try again or get close to it. Also unable to get to locations

within the lab area but will get a sample from just outside the Sludge Dewatering Building.

There may be someone who has been getting into the site buildings not sure if materials are being stolen.

Crews are sampling according to the plan. They have been hitting water at about 4-10 Feet

1025 - #275 Sample taken to 10 Feet

Working with David from CRA - He is collecting characterizing, & sampling the plugs that come in.

They have already finished 50-60 locations and should finish up next week

1041 #279. low overhead clearance, so hard to use short tubes for sample - went to 9'

David has been collecting samples at 0-1' and again at 2' above water table. ^{since so shallow} Hasn't seen anything to warrant 3rd sample.

Summary 5-20-10

Finished test pits on Monday. Were unable to finish Friday due to rain and the sides caving in

1120 #268 10' sample - Being close to river - all the samples have been primarily sand thus far

1145-125 off site - Lunch 7 samples before lunch

1245 #267 0-5' contained back fill and only yielded ~ 1.5' of recovery - went back for another 0-5' boring - hit water out about 5'

Photo 1 → ^{Face} Entrance to Building samples

1315 #263 0-5' contained Black Ash - ~~the~~

5-10' Too muddy & wet to collect

soil sample - It is very dark, black, g

~~1345~~ No color, but some silt. David

requested a temp well set up at this location. The PID didn't alarm.

but elevated once in the water. ~ 45

1345 #262 - had to do short tubes - very low recovery will do 0-4' sample ^{4-8'} there was

14" concrete at this location. Organic

Silty sand ~ 5-8'

Kalamazoo
#44 Nature Center

Plainwell Mill Site

5-26-10 cont...

1420 #223 0-9' collect but low recovery

1425 #264 - Suggest putting temp. monitoring well here instead of #263. He it is close and same conditions. ^{Driller} getting refusal @ #263. Some Clay at 6-8' Photo #2

1500 #225 jack hammer used - low recovery -

1510 #266 MS/MSD

1530 #269 - good Recovery Dry until ~ 7'

1545 #258

1605 #270 2 attempts at 0-5' only 10" of recovery only one sample possible
5-10' - No recovery -

Sample location next to a trench

- David collected 17 sample locations and 31 samples

- Corrie got 7 sample locations done ^{to} they had problems getting through concrete at some locations. These may need to be cored instead

Sunny
↑ 80's

5-27-10 Plainwell mill

0700 Tetra tech onsite

working in Building 1 overseeing Corrie.

There are 8 sample locations here

photo 3 N side ^{Face} entrance to Building 1

photo 4 rat inside Building 1A

starting with # 205, 206, 207 inside building 1A

photo 5 N side Build 1 & 1A

0745 #200

information:

city wants to keep tanks

had to move location in Building 25

there was a turbine.

~~1800~~ 531 8722 0845 #206 - got refusal at this location

with the trenches and pedestals in this room. May propose to move across the room to thorough cover room, but have to get clearance from Whites.

Summary -
Info
last week

The test pits were ~~also~~ didn't show anything. one showed remnants of an old house.

- Added a 26th well near mw-5

- no evidence of residual paper

- They will write a memo about all the refusals and propose the alternate locations

5-27-10 Plainwell Court.

0900 #205 - Dup

0930 Finished in Building 1A - moving to Building 3
259, 260, 261 - 261 is on top of machinery.

↳ Building 28/29 in-between space. They tried 259/260
but it was construction debris then concrete. They
couldn't sample it grabbed surface sample. They
will propose to move it out of crawl space area.

1000 The 2nd rig broke over at Building 19

so David and the crew are going to the
sludge dewatering plant to recollect one
sample there where one broke, set a
temp well, and collect 1 remaining soil bore
location. - Doug will try to fix rig.

1010 #217 & 218

photo 6 - Soil 10W inside Sludge Dewatering Bldg.

1045 photo 7 Installing temp MW inside

Sludge Dewater Bldg. 9-10' well

The tip got clogged so they had to make a new
hole.

1140 #327 β - 8-10' sample - had to recollect due
to broken sample jar.

1200 - 1230 Lunch

1245 - Last soil Boring @ Sludge Dewater Bldg.

photo 7 ↑ 8-15' #343

1300 #216 had to use a jack-hammer -
got very low recovery

1400 David's Drill Team discovered an
underground vault. Unable to recover
a sample @ #226 He tried 10 feet
away and still went through to the vault
- located within Bldg 3

1415 #2012 Done

1500 #265 0-7.5' done w/ jack hammer
to finish #275 w/ jack hammer then
will be out of sample jars

1520 #2011 outside sample - layer of
fine paper material below ground ~ 4" deep
Dag located ~ 3-4' Photo 8 & 9
South side of building near MW-2

1530 #2010 has to be moved ~ 1 ft to
clear utility lines - photo 10

1410 Carrie did 16 samples locations
but 1 was a refusal so 15 recovered
David did 10 locations & 2 refusals

Next week there are 9 locations, 10 Refusals
If we relocate approval if utility clear

Bukany Hand
5/27/10

5/28/10 Plainwell Mill Site
got approval to field approve location
changes due to refusals or Blockages
where locations are located

0800 Terra tech onsite

Crews are working at coring locations where
concrete was too thick to penetrate

#253, 209, 251, 271, 256

Refusals

#270 - to make a bigger hole to clean out concrete
debris and see if possible to get a boring
if not working they will move location
~5' to the east away from a wall

#259 & #260 - to create 1 new location outside
of crawl space area 28/29 into Bldg 11

#226 Inside vault - moved 10 feet N and still hit
the vault. There are many stumps &
machinery in this room will try to
move further N b/c there are locations
covering the other directions

#256 2' of concrete got minimum recovery, wants
to move 10' SW and have cored

BA

#229 Refusal @ 2'

#228 Refusal @ 3.5'

⇒ will make 229-B Between the
2 locations

#235 Refusal @ 2' will try
~5' West on the other side of the
trench

#251 Bored over 2' of concrete - will move
location outside concrete pad 10' SE

#252 2.5' of concrete & still didn't get
through. There is a large concrete pad
here. To move ~45' S to provide
ample coverage in the room (252-B)

#297 Refusal @ 3' Will move North into
the loading ^{Ramp} Bay. This area is ~5' lower
and less concrete. They will have to
avoid the old railroad spurs.

#247 Refusal @ 2.5' - move 5' NW outside ^{concrete} ^{seam}

#248 Refusal @ 6' was able to sample 0' #4-6
will move ~3' N (248B)

²
Allied-Plumwell Drilling Oversight 6/1/10

1040 SulTRAC Arrives on site (C. Foxman)
receive site orientation from CRA
Called Jodi from CRA - she is
drilling in the Mill w/ David, Evan
is GW sampling.

1100 Met with Jodi Dembausek
and she has been re-locating
utilities for the new drilling location
David has started soil sampling
and Evan is begining groundwater
sampling. Jodi will direct me
to the drilling locations w/ David.

1151 SB-251 drilling - through concrete
Met with David from CRA - Jodi
left the site to go to the landfill
CRA to break for lunch

1300 Began drilling at SB2009 - SB251
had 2' of concrete. CRA was instructed
to bag concrete cores and label bags
for possible future demo of buildings.
instructed by MDD
Two attempts to drill through 2' of
concrete at SB-251 and could not
reach soil. ~~will~~ David will talk

— *clg* —

³
Allied-Plumwell Drilling Oversight 6/1/10

to Jodi about moving location?

SB2009 Med brown sand & gravel coarse 5-10'

0-5' dk brown sand & gravel

PID reading 1 ~ 0.8

1' of concrete

1-2' sample VOC, PCB, SVOC, Met

5-7' sample VOC, PCB, SVOC, Met

1310: SB253

32" of concrete

only one sample collected from this
location because water was encountered
at 5' bgs. Water at 4.5' bgs

32"
0-5' ~~dk~~ brown gravel

~~SB2009~~ 2.5-4.5' Sampled VOC, SVOC, Met
PCB

1 ppm PID from 0-5

0.4 ppm PID from 5-10

for these two borings they used a
track mounted geoprobe Model 6010 DT
Evan sampled Tw 2001 - used penetrometer
will reset Tw 246 b/c no water
in first ~~sample~~ temp well set
GW sample collected & analyzed for
VOC, SVOC, PCB, Filtered & unfiltered
Metals.

— *clg* —

4 Allied-Plainville Drilling/GW oversight 6/1/10

1415: Evan sets up at TW-263

1430: Set up peristaltic pump and David with Driller installing the temp well that was dry (TW-246) DTW = 5.36' from TOL. TOL is approximately 1' above ground surface.

Stabilize parameters: pH, Conductivity, DO, ORP, Temp. No turbidity because filtering metals. - water is pretty clear at the time of sampling.

1505: Collect GW sample from TW-263.

Time	pH	Temp	Conduct	ORP	DO	Turbidity
1450	7.22	13.99	0.678	-68	0.29	Clear H ₂ O
1455	7.22	13.87	0.677	-78	0.30	
1500	7.23	13.84	0.674	-85	0.28	
1505	7.23	13.84	0.673	-88	0.27	↓

analysis: VOC, SVOC, PCBs, Metals & Arsenic Metals, CN⁻ (Evan to pack samples).

1508 CRA collecting samples at SB 270

sampled 0-1' below concrete (PVI)

and 3-5' below concrete (PVI)

lots of gravel so recovery has not great for these samples - sampled for same parameters. H₂O at 5' - used truck-mounted

Ch G

5 Allied-Plainville

Drilling + GW Sampling Oversight 6/1/10 geoprobes 66100T. (2 samples)

1530 Redrilled SB256 because of refusal last week.

8" concrete

Sand & gravel w/ rocks / big pebble sized pieces. water ~ 4' ~ 4.5' therefore only one sample collected at this boring from 0-1'. Correction!

Sample able to be collected from 2.5' to 4.5'. (2 samples)

1540 Driller sampling/boring SB270 with truck-mounted Geoprobes

0-1 ~ 1.5' of concrete

Sample collected from 1.5 ~ 4' then without water at 5'

only one soil sample collected from this location. Need turn so w/ gravel (1 sample)

1615 CRA finish sampling for the day they will pack samples and ship sample collected.

baseline: GW sample collected at TW-328 ~~at~~ in the morning.

1620 Sub TRAC leaves site.

Ch G

6
Allied-Plainwell SB/GW Sampling Overlight 6/2/10
0700 Sal TRAC arrived on site. Raining w/ Thunder & lightning. CRA arrived 0630 to set up for the day. Mark drilling on northwest side of site while Evan is in the southwest portion of the site to get started with drilling inside w/ Jackhammer

0725 Sample collected from SB20B
Mostly fill in the top sample 0-5'
5-10': some organic material from silty material ~ 4" in middle of interval.

0740 1-2' sampled for VOL, SVOL, PCB, Metals
3-5' sampled for VOL, SVOL, PCB, Metals
Sample collected from SB226
No recovery from 5-10' interval.
Sample collected from 1-4' b/c of such low recovery from 0-5' as well. Geoprobe setting up at SB200. (1 sample)
1-4' Sample for VOL, SVOL, PCB, Metals

0805 Samples collected from SB206 ~ 8" to concrete.
0-2' sampled for VOL, SVOL, PCB, Metals
2.5-4.5' Sampled for VOL, SVOL, PCB, Metals
water ~ 1.5' sample in fill material. (2 samples)
Chz

7
Allied-Plainwell SB/GW Sampling 6/2/10
0840 Move to SB207
0-5' : 2" gravel/sa med bur followed by bk fill to 5' w/ sinter & sly materials w/ coal.
5-10' sorted med grain sa/med-bk bur
10-15' natum ~ 12-15' sa/grl. natum
1+bur w/ rocks poorly sorted
15-20' : native materials sa/grl poorly sorted. water at 16' met
0-1' Sample collected for VOL, SVOL, PCB
14-16' Sample collected for VOL, SVOL, PCB, Met (one foot of asphalt above the soil)
(2 samples collected).
will set a temp well at this location. Took 1 picture at this location

0905 Drillers installing the temp well.
Setting it at 20' bgs.
backnote: while David was drilling with Geoprobe, Evan was working with pump in building 1A with Jackhammer
Samples collected at SB209 & SB210
2 samples collected from SB210:
0.5-1.5' Sample collected
3-5' Sample collected.
Chz

8
 Allied-Plumwell SB/GW Sampling tonight 6/2/10
 1010 SB209 was able to get down to 8' bgs. Not saturated soil but moist - Driller says they can't get any deeper so EOB at 8' Sample collected at 0-1' for VOC SVOC PCB MET 6-8' for VOC SVOC PCB TOL MUD Native material s/gvl

1025 David sampling/purging TW246 DTW = 13.2' from ground surface.

1100 Sample collected at SB208 0-1' Fill 4-6 - refusal at 6' fill sampled at 0-1' and 4-6'

1115 Sample collected at TW246 for VOC SVOC PCB filtered & unfiltered Metals. Sample from 1045

1130 ORA on lunch (driller) David setting up at TW297 and organizing samples

1215 Driller return - will set up and start at SB248

1315 still drilling at SB248

1330 Were able to sample to 2' then refusal. Sampled at 0.5-1.5' for

Chris

9
 Allied-Plumwell SB/GW Sampling tonight 6/2/10
 VOC SVOC PCB Metals. only one sample collected at SB208 (sample is fill material w/ s/gvl/sky/rink).

1410 Sample collected at SB235 0.5-1.5' 0.5-2' sampled for VOC SVOC PCB Metals fill material. Water at 5' sampled 3-5' for VOC SVOC PCB Metals

1430 Started drilling at SB229 backnote: all soil cuttings are being drummed and the concrete cores are being bagged and labeled for later disposal? during ~~demolition~~ demolition of the building.

1430 Police arrived onsite because some human activity has been occurring within the buildings at night - Items being moved around w/in the buildings. Jodi called the Police department to investigate any unusual occurrences.

1443 Sample collected from 0-2' at SB229

Chris

10

Allied Plainwell SB/GW Sampling Oversight 6/2/10

1450 Sample collected from 0.5-1.5' for VOC, SVOC, PCB, Metals.

Sample from 2-4' water sat/gul and wet at 3' kgc - mostly slough in the liner - will only collect the upper sample.

1515 CRA done for the day - packing samples and getting ready for tomorrow. SubTPAC leaves site for the day.
END OF DAY

6/2/10

11

Allied Plainwell SB/GW Sampling Oversight 6/3/10

0630 SubTPAC arrives onsite. Cloudy w/ chance of showers. Highs in upper 70°F today. CRA onsite getting ready to advance the last two borings. SB225 & SB259. These two will be done using a jackhammer.

0705 Resampling SB-225 from 1-4' because jar broke at the lab. needed only 1,4 oz jar for general chemistry parameters. Setting up on SB259.

0725 Soil samples collected at SB259. 0-4' very low recovery (9" of concrete matrix sat/gul poorly sorted. 4-8' wet - no tube at 4' one sample for analysis at this location. 1-4' interval for VOCs, SVOC, PCB, Metals.

Finish drilling.

0750 David out with drillers patching holes and Evan to get to site ~ 0800 to collect the last two GW samples.

0837 Start setting up at TW-297 to collect GW samples DTW ~ 16.80' from TOC.

12
Allied-Plainwell SB/GW Sampling Oversight 6/3/10
0906 Collecting readings for stabilization parameters. Started purging, 0825
TW-297 DO

Time	Purge rate	pH	Temp	Conduct	ORP	Turb
0850	300 mL/min	7.40	12.43	0.753	-26	1.22
0900		7.42	12.44	0.755	-29	1.22
0905		7.39	12.38	0.758	-29	1.24
0910	↓	7.40	12.30	0.756	-28	↓ 1.23

Total gallons purged 2.5 gallons.

CFA collected MSM/D sample at this location. Double to GS TPC to Ground surface ~ 2'. VOC, SVOC, PCB, filtered & unfiltered Metals

1000 Finish sampling at TW-297 and set up at TW-279. DTW = 6.66' from TOCs Begin Purging Water Quality parameters:

Time	Purge rate	pH	Temp	Conduc	ORP	DO
1020	300 mL/min	7.54	10.55	0.710	-11	0.41
1025		7.52	10.55	0.707	-15	0.39
1030	↓	7.51	10.55	0.707	-16	0.38

water mostly clear - slightly turbid.

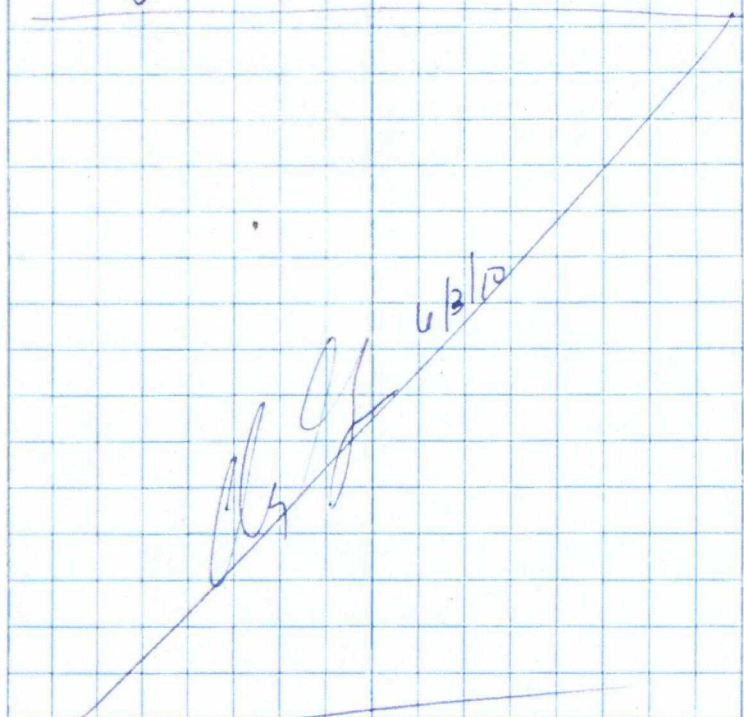
Collect GW sample. VOC, SVOC, PCB, filtered & unfiltered Metals. TOC to ground surface ~ 2'

1100 Finish collecting samples for this

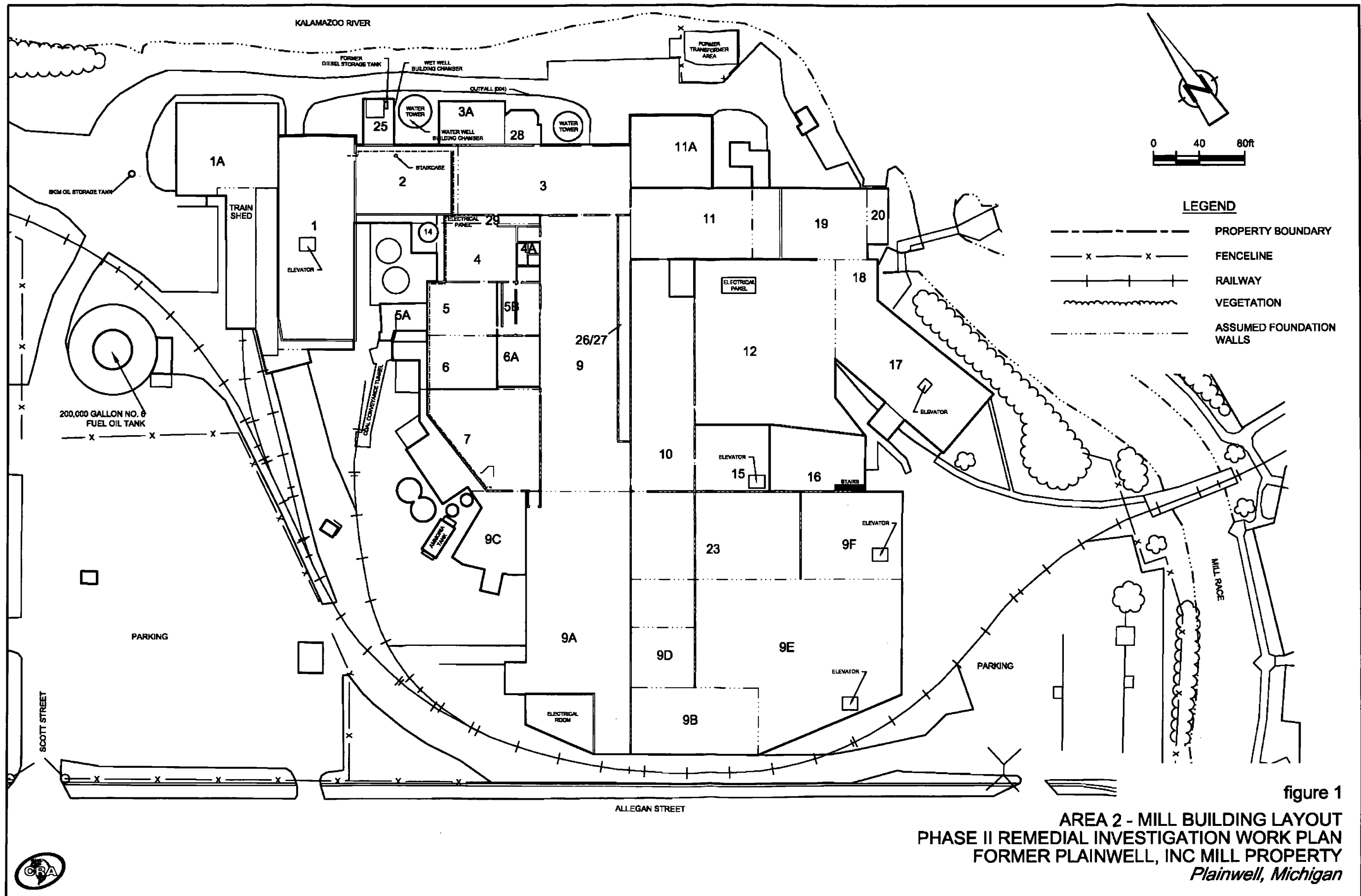
— *dy*

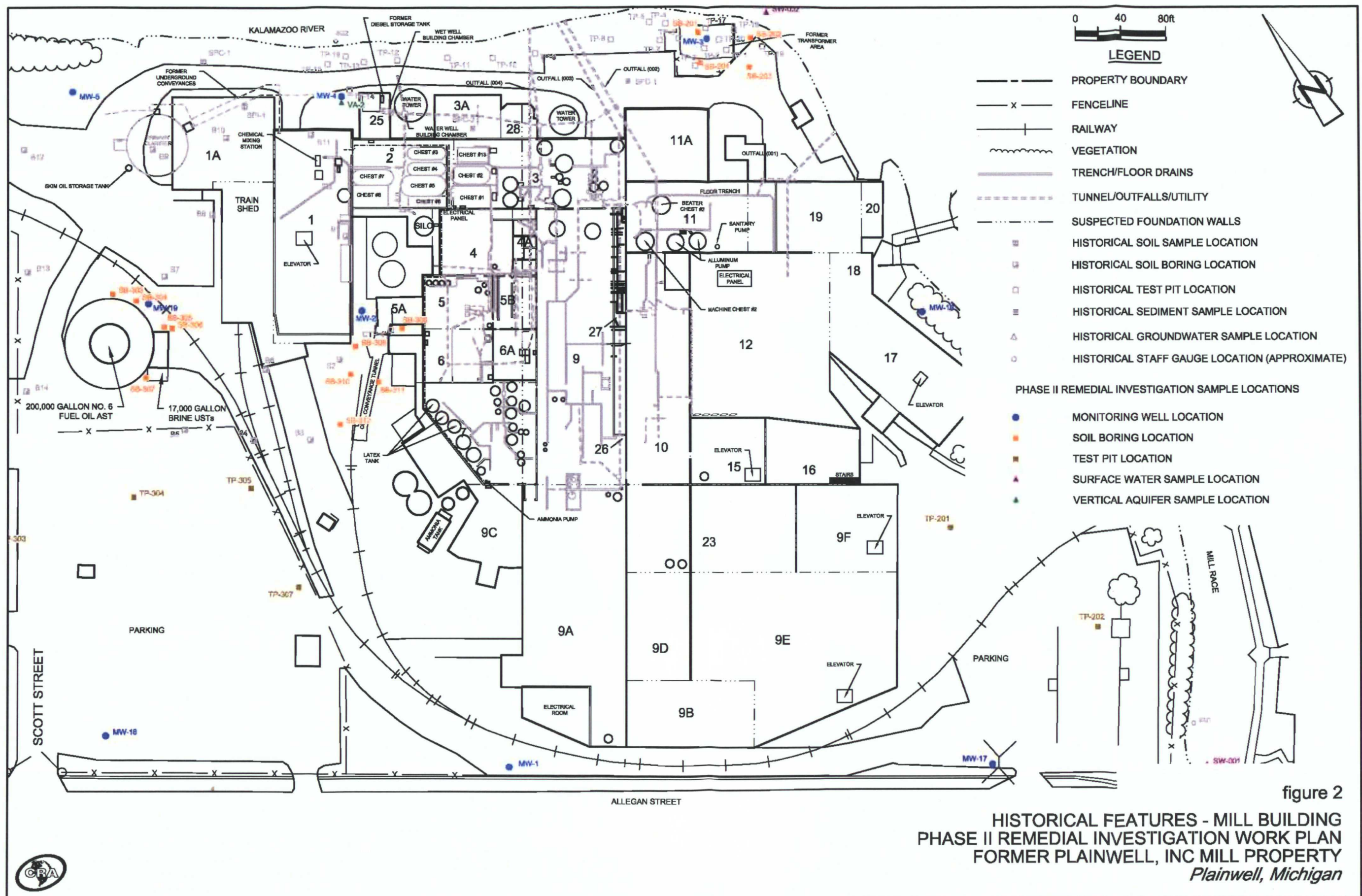
13
Allied-Plainwell SB/GW Sampling Oversight 6/3/10
field event. CFA plugging holes and pulling all temp wells and abandoning them.

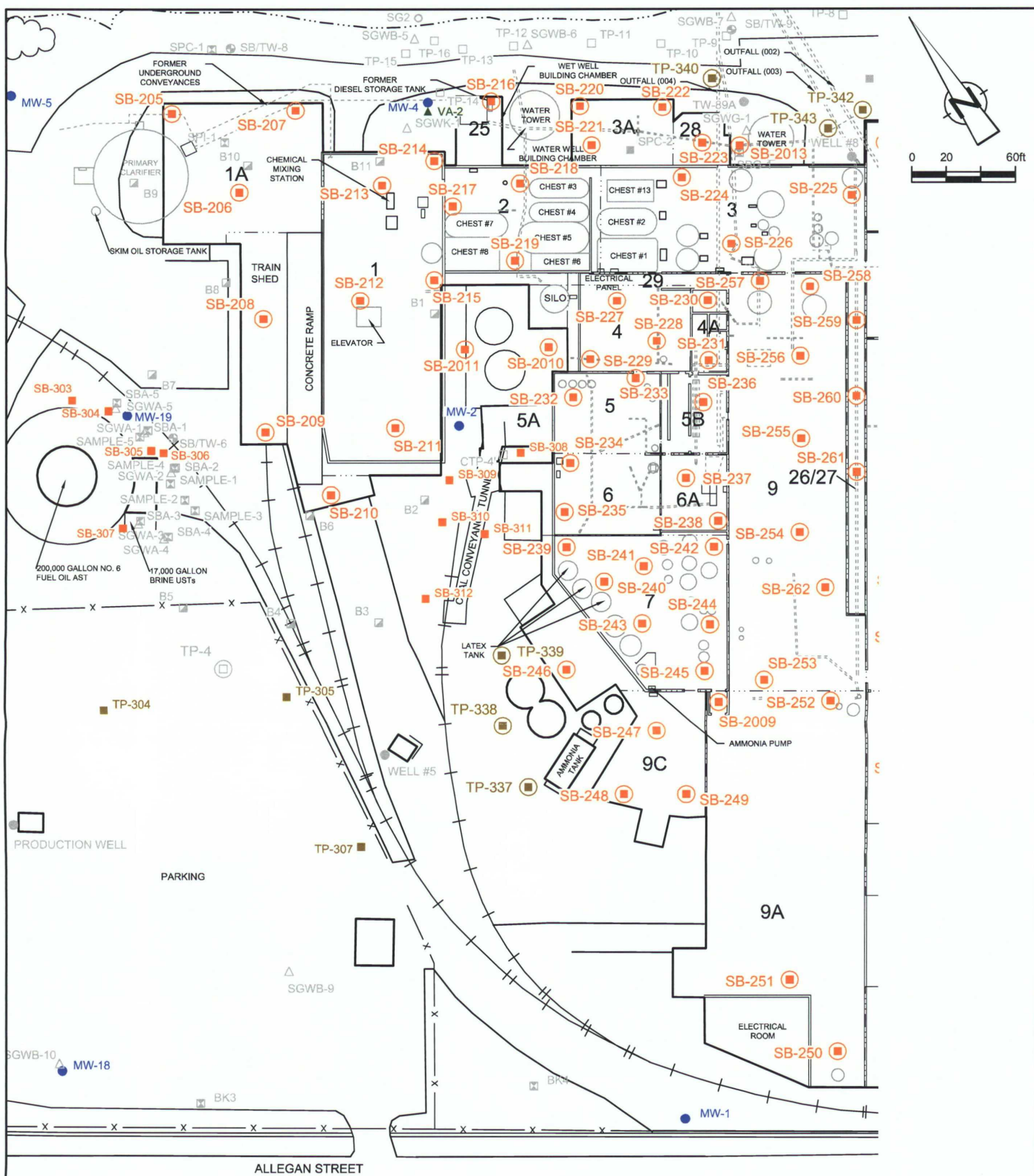
1130 SulTRAC Leanos site. END OF DAY
Backnote: Soil samples were not collected from SB-252 because of the thick concrete and relocating the borings didn't wasn't successful. Same situation with SB251



ATTACHMENT 1
CRA SITE MAP AND SAMPLE LOCATION FIGURES
(Seven Sheets)







LEGEND

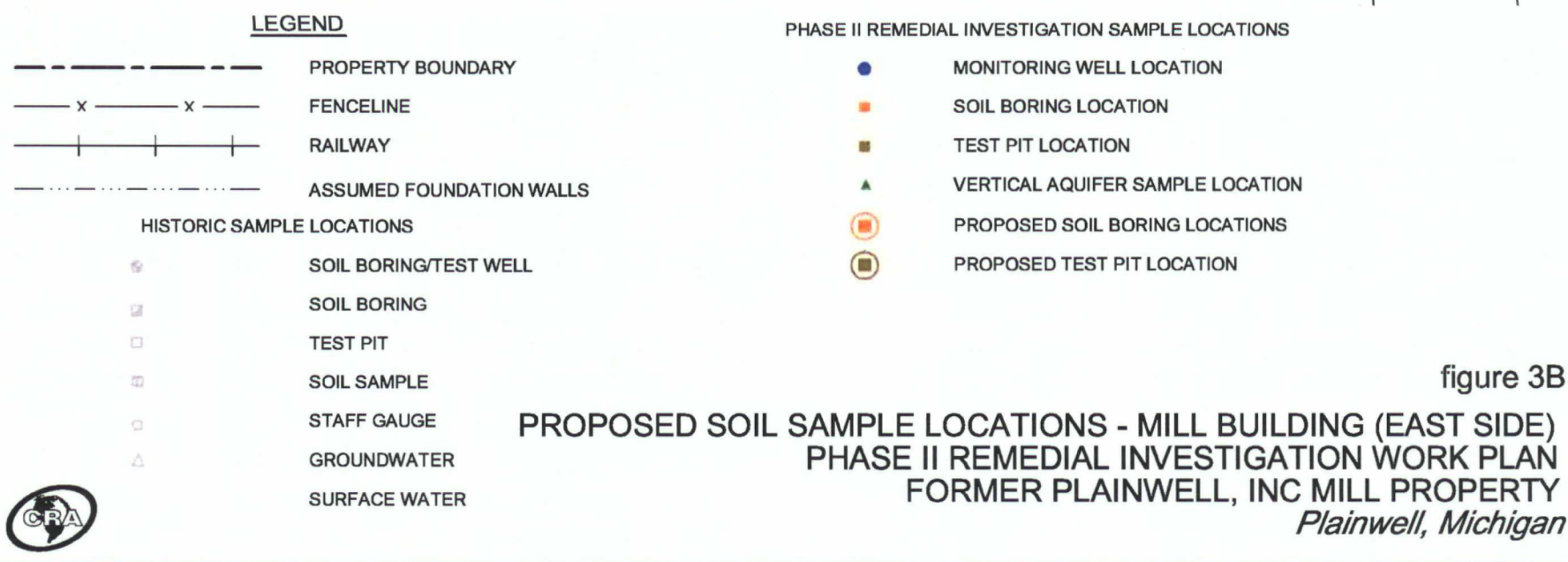
- PROPERTY BOUNDARY
- x - FENCELINE
- + + + RAILWAY
- - - ASSUMED FOUNDATION WALLS
- HISTORIC SAMPLE LOCATIONS**
- ⊙ SOIL BORING/TEST WELL
- ⊠ SOIL BORING
- TEST PIT
- ⊡ SOIL SAMPLE
- STAFF GAUGE
- △ GROUNDWATER
- ▲ SURFACE WATER

PHASE II REMEDIAL INVESTIGATION SAMPLE LOCATIONS

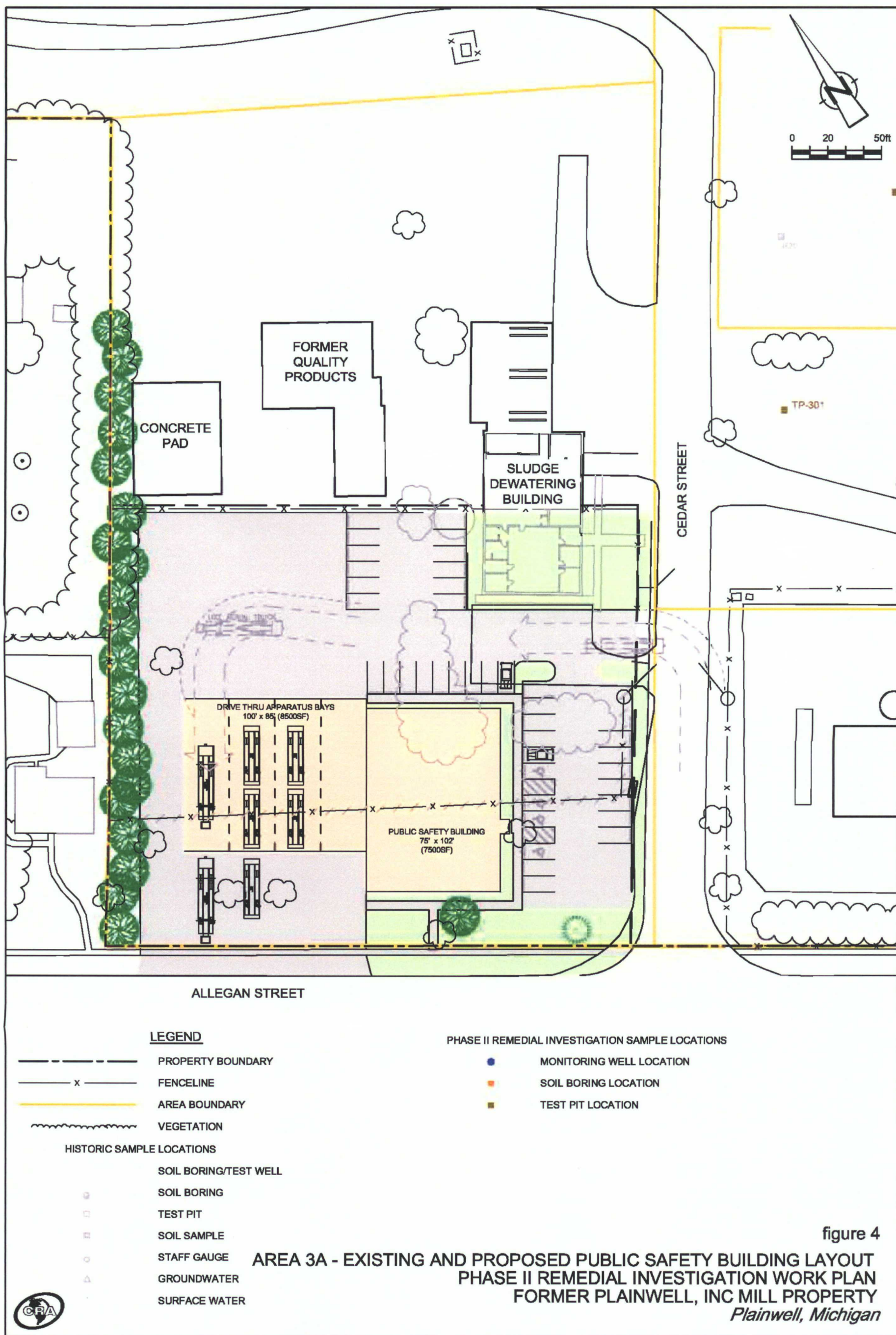
- MONITORING WELL LOCATION
- SOIL BORING LOCATION
- TEST PIT LOCATION
- ▲ VERTICAL AQUIFER SAMPLE LOCATION
- ⊙ PROPOSED SOIL BORING LOCATIONS
- ⊡ PROPOSED TEST PIT LOCATION

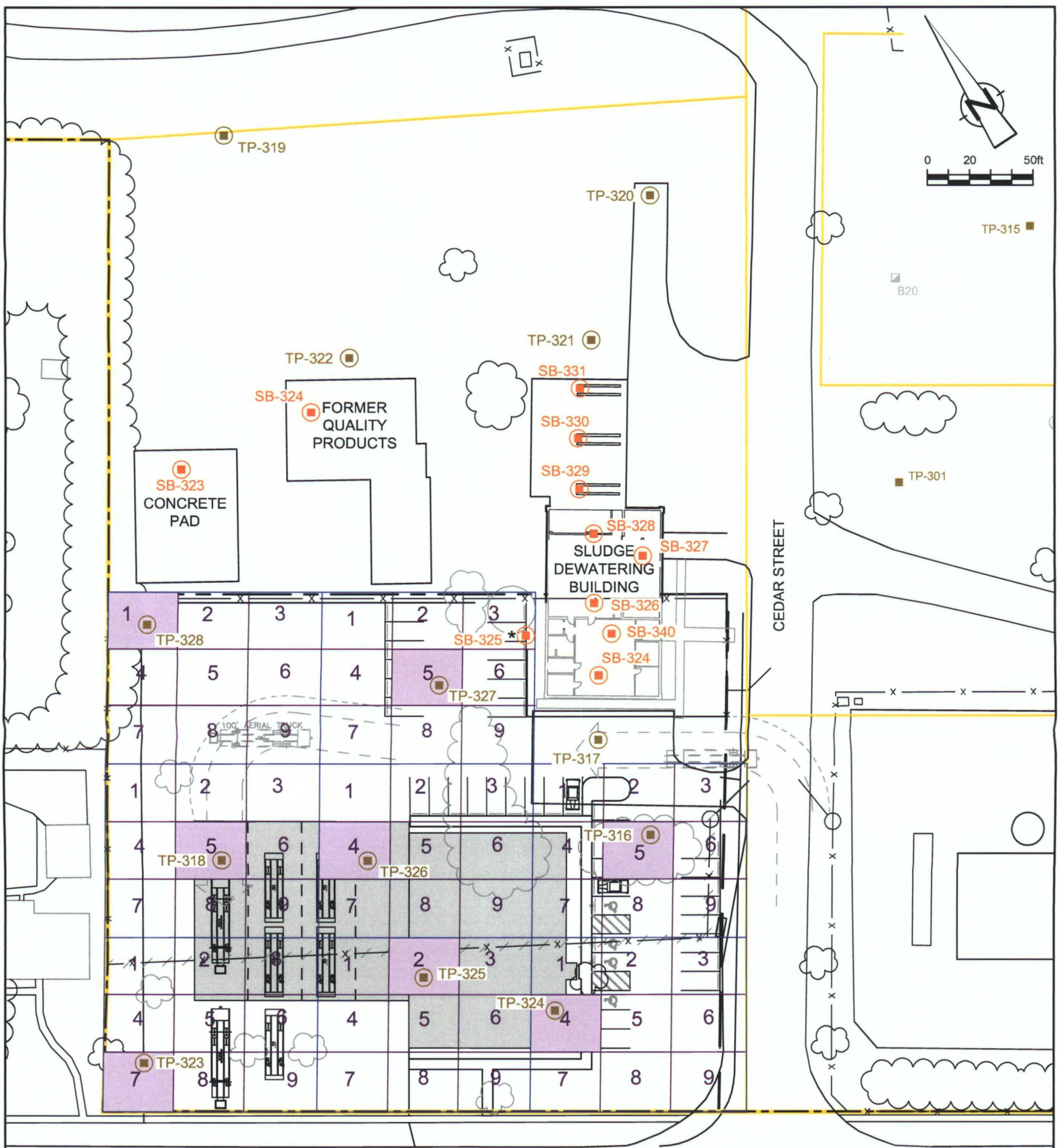
**PROPOSED SOIL SAMPLE LOCATIONS - MILL BUILDING (WEST SIDE)
PHASE II REMEDIAL INVESTIGATION WORK PLAN
FORMER PLAINWELL, INC MILL PROPERTY
Plainwell, Michigan**

figure 3A



PROPOSED SOIL SAMPLE LOCATIONS - MILL BUILDING (EAST SIDE)
PHASE II REMEDIAL INVESTIGATION WORK PLAN
FORMER PLAINWELL, INC MILL PROPERTY
Plainwell, Michigan





ALLEGAN STREET

LEGEND

- PROPERTY BOUNDARY
- x - FENCELINE
- AREA BOUNDARY
- ~ VEGETATION

HISTORIC SAMPLE LOCATIONS

- SOIL BORING/TEST WELL
- SOIL BORING
- TEST PIT
- SOIL SAMPLE
- STAFF GAUGE
- △ GROUNDWATER
- ▲ SURFACE WATER

PHASE II REMEDIAL INVESTIGATION SAMPLE LOCATIONS

- MONITORING WELL LOCATION
- SOIL BORING LOCATION
- TEST PIT LOCATION
- PROPOSED SOIL BORING LOCATION
- PROPOSED TEST PIT LOCATION
- * A SAMPLE DOWN GRADIENT OF SB-325 MAY BE COLLECTED BASED ON PROFESSIONAL DISCRETION

figure 5

AREA 3A - PROPOSED SOIL SAMPLE LOCATIONS
PHASE II REMEDIAL INVESTIGATION WORK PLAN
FORMER PLAINWELL, INC MILL PROPERTY
Plainwell, Michigan



